

## ABSTRACT OF THE DISCLOSURE

Dysregulation of vascular function is observed in brain endothelium derived from patients affected by Alzheimer's disease. This may be manifested at the cell or  
5 organ level: *e.g.*, abnormal capillary morphogenesis, defective angiogenesis, inappropriate cellular senescence, mitotic catastrophe, or combinations thereof. This observation can be used for diagnosis or treatment of neurodegenerative disorders and other cognitive impairments.